

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

10/18/2011

Jaclyn Sexton Assistant District Attorney, Norfolk County

Dear ADA Sexton,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Peter Piro.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Peter Piro

EDUCATION

Boston Unversity

B.A. in Chemistry and Minor in Biology, 1989

HONORS

Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry

Valedictorian of the Chemistry Department

EXPERIENCE

Department of Public Health/State Laboratory Institute

Chemist III, II, I/ Assistant Analyst

December 1991-Present

Supervise the operation and maintenance of the Gas Chromatography/Mass

Spectrometry Laboratory. Analyze controlled substances for State and Federal law
enforcement agencies. Qualified as an expert witness in Massachusetts courts and

U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician

September 1990-December 1991

Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank.

TRAINING AND ORGANIZATIONS

- * Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- * Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- * Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27th 1995.
- * Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- * Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25th 2002, at Agilent Technologies.
- * Notary Public since 1993.

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

Boston Hours

Amherst Hours

| 8:00 - 11:00 2:00 - 4:00 | DRUG RECE | IPT | 9:00 - 12:00 1:00 - 3:00 |
|---|-------------|-----------------------------------|-------------------------------|
| City or Department: | | Police Reference No.: | |
| Name and Rank of Submitting Officer: | Det w. Ward | | |
| Defendant(s) Name (last, first, initial): | | | |
| To be completed by Submitter Description of Items Submitted | | To be completed b Gross Weight | y Lab Personnel Lab Number |
|) p/b of crack rocaine | | 1,89 | |
| | | | |
| | | | |
| | | | i |
| | | | |
| | | | |
| | | | |
| | | | |
| Received by: | _ElO | Date: | 3-3-1/ |

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

Boston Hours

8:00 - 11:00

DRUG RECEIPT

Amherst Hours

9:00-12:00

| City or Department: | Police Reference No.: | |
|--|---------------------------------|--------------------------------|
| Name and Rank of Submitting Officer: | N WARD | |
| Defendant(s) Name (last, first, initial): | | |
| To be completed by Submitter Description of Items Submitted | To be completed Gross Weight | by Lab Personnel Lab Number |
| 2 P/B of off-white rock subst. | 14.96g | |
| | | |
| | | |
| · | | |
| Received by: | Date: | 3-3-11 |

No.

Date Analyzed:

4-18-11

City: Quincy Police Dept.

Officer: Detective WILLIAM WARD

Def:

1

Amount:

No. Cont:

Cont: pb

Date Rec'd: 03/03/2011

Gross Wt.:

1.89

No. Analyzed:

Net Weight: 〇・入冬

#Tests: 6PD

Subst: SUB

Prelim: Cocarre (1)

Findings:

Date Analyzed: 4-18-11

City: Quincy Police Dept.

Officer: Detective WILLIAM WARD

Def:

Amount: No. Cont:

Cont: pb

Date Rec'd: 03/03/2011

Gross Wt.:

14.96

2

No. Analyzed:

Net Weight: 8-16

Subst: SUB

Tests: 12A0

· LIPPIA

Prelim: cocourago

Findings:

Folk_OIG_PRR_041998

DRUG POWDER ANALYSIS FORM

| SAMPLE# | AGENCY Que | ANALYST | <i>8999</i> |
|------------------------------|-----------------|----------------------|--|
| No. of samples tested: | _ | Evidence Wt. | |
| PHYSICAL DESCRIPTION: | | Gross Wt (): | 0.4238 |
| Off unite | charing substra | Gross Wt (): | |
| | 11-87 | Pkg. Wt: | |
| | | Net Wt: | 0-2832 |
| | | | |
| | | • | |
| | | | |
| | | | |
| • | | | |
| | | | |
| PRELIMINARY TESTS Spot Tests | | Microcrystalline Tes | its |
| Cobalt | · | Gold | manadari |
| Thiocyanate (-) + | | Chloride 4 | |
| Marquis | | TLTA (~) + | |
| Froehde's | · . | OTHER TESTS | • |
| Mecke's | | | *************************************** |
| | | | |
| | | T | reconstructive convenience of the convenience of th |
| | | | |
| PRELIMINARY TEST RESULT | <u>'S</u> | GC/MS CONFIRMATORY | 'TEST |
| RESULTS Cocame | | RESULTS COSCUST | Contract Constitutes and Const |
| DATE <u>(1-15-1)</u> | | MS PSS NOTARAGO | |
| | | DATE 4-18+11 | |

DRUG POWDER ANALYSIS FORM

| SAMPLE# | AGENCY Que | va | ANALYST | 675 |
|------------------------------|-------------|--|--|--|
| No. of samples tested: | | . | vidence Wt. | |
| PHYSICAL DESCRIPTION: | | Gros | ss Wt(2_): | 10.4337 |
| 08 en ie 0 | Juny ELBOTO | ← Gros | ss Wt (): | The state of the s |
| | W562 | | Pkg. Wt: | |
| | | | Net Wt: | |
| | | | | |
| | | • | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| PRELIMINARY TESTS Spot Tests | | Microc | rystalline Tests | |
| Cobalt Thiocyanate (—) + | | Gold 2 Chloride | + | |
| 2 Marquis | | 2 TLTA (| _)- | |
| 3 Froehde's | | <u>011</u> | ER TESTS | |
| 2 Mecke's | | Distribution of the second sec | , | |
| | | | none filibbonous de la la companya de la la la compa | 900000000000000 0000000 |
| | | | *************************************** | |
| PRELIMINARY TEST RESULTS | | GC/MS CON | IFIRMATORY T | EST |
| RESULTS Cocause | marau. | RESULTS_ | cocourà | of consequence of the state of |
| DATE 4-15-11 | <u> </u> | MS OPERATOR | b26 | |
| | | DATE | 4-18-11 | |

samples tested; 2

| # | Gross Welght | Packet Weight | Net Weight | # | Gross Welght | Packet Weight | Net Welght |
|----|-----------------|--|--|-----|--|---------------|--|
| 1 | 7.3092 | 1.3027 | 6.0065 | 26 | | | |
| 2 | 3.1243 | 0.9655 | 2.1588 | 27 | | | |
| 3 | | | | 28 | | | |
| 4 | | | | 29 | | | |
| 5 | | | ************************************** | 30 | | | |
| 6 | | | | 31 | | | |
| 7 | | | | .32 | | | |
| 8 | | | | 33 | | | |
| 9. | | | | 34 | | | |
| 10 | | | | 35 | | | |
| 11 | · | | | 36 | | | |
| 12 | 1,1 | Management and the second seco | | 37 | - Million consideration and the constant of th | | |
| 13 | | | | 38 | | | |
| 14 | . , | | | 39 | | | |
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| 16 | 4 | | | 41 | CONTRACTOR OF THE PROPERTY OF | | |
| 17 | | | | 42 | | | · |
| 18 | | | | 43 | | | - 44 |
| 19 | | | | 44 | | | |
| 20 | | | | 45 | | | 1974 to the state of the state |
| 21 | | | | 46 | | | ··· |
| 22 | | | | 47 | | | |
| 23 | | | · | 48 | Managana Anna Managana | | |
| 24 | | · | 440 | 49 | | | |
| 25 | | | | 50 | | | |

Calculations:

Ne+ w+= 8.1653

/PPid 10-14-11

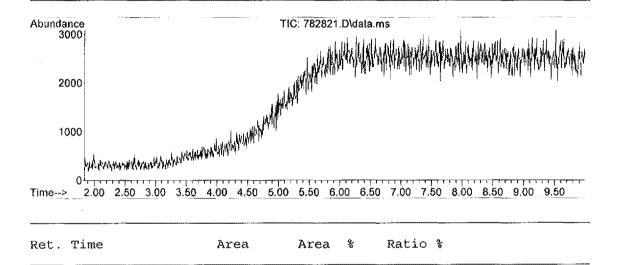
Information from Data File:

File Name : C:\msdchem\1\System7\04_15_11\782821.D

Operator : ASD

Date Acquired : 15 Apr 2011 12:46

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

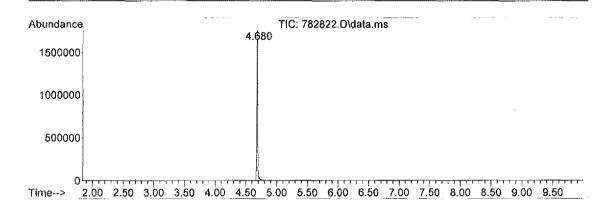
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Operator : ASD

Date Acquired : 15 Apr 2011 12:59

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.680 | 1786936 | 100.00 | 100.00 |

File Name : C:\msdchem\1\System7\04_15_11\782822.D

Operator : ASD

Date Acquired : 15 Apr 2011 12:59

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

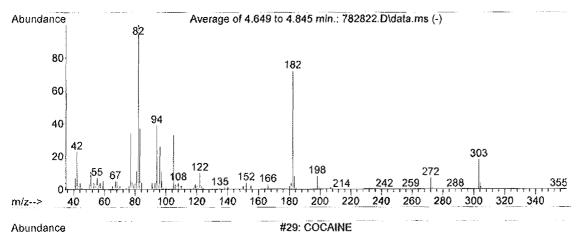
C:\Database\PMW TOX2.L

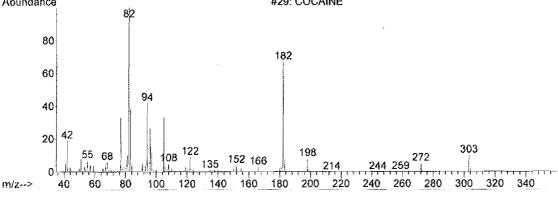
PK# RT Library/ID CAS# Qual

1 4.68 C:\Database\SLI.L

COCAINE

000050-36-2 99



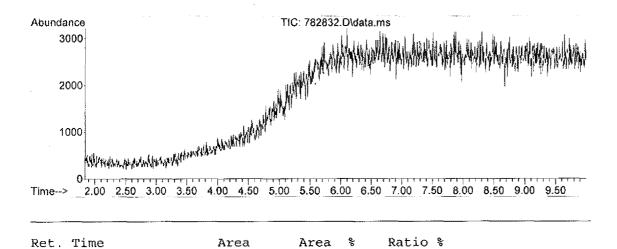


File Name : C:\msdchem\1\System7\04_15_11\782832.D

: ASD Operator

Date Acquired : 15 Apr 2011 15:04

Sample Name : BLANK Submitted by : ASD Vial Number 1 AcquisitionMeth: DRUGS.M Integrator : RTE



NO INTEGRATED PEAKS

: C:\msdchem\1\System7\04_15_11\782833.D File Name

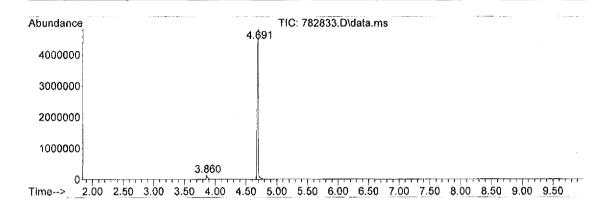
Operator : ASD

Date Acquired : 15 Apr 2011 15:17

Sample Name Submitted by

: ASD 33

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 3.860 | 247256 | | 4.39 |
| 4.691 | 5634380 | | 100.00 |

File Name : C:\msdchem\1\System7\04_15 11\782833.D

Operator : ASD

Integrator

Date Acquired : 15 Apr 2011 15:17

: RTE

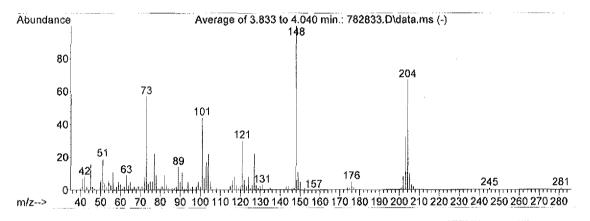
Sample Name :
Submitted by : ASD
Vial Number : 33
AcquisitionMeth: DRUGS.M

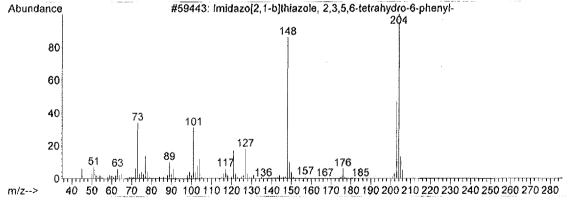
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

| PK# | RT | Library/ID | | CAS# | Qual |
|--------|------|------------------------------------|-------------|-------------|------|
| 1. | 3.86 | C:\Database\NIST05a.L | | | |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 006649-23-6 | 98 |
| | | Imidazo[2,1-b]thiazole, | 2,3,5,6-tet | 014769-73-4 | 98 |
| | | Imidazo[2 1-b]thiazole | 2.3 5 6-tet | 006649-23-6 | 98 |





Minimum Quality: 80

File Name : C:\msdchem\1\System7\04_15_11\782833.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:17

Sample Name

Submitted by : ASD Vial Number 33 AcquisitionMeth: DRUGS.M Integrator : RTE

C:\Database\SLI.L Search Libraries:

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

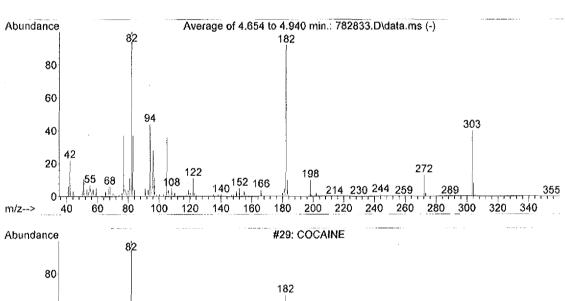
PK# RT Library/ID CAS# Qual

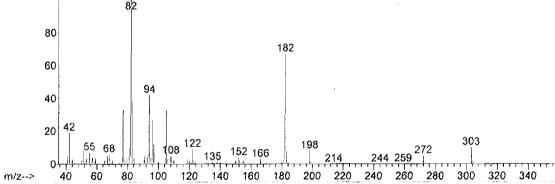
4.69 C:\Database\SLI.L 2

COCAINE

000050-36-2

99



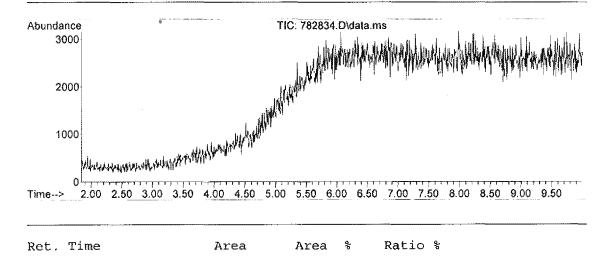


File Name : C:\msdchem\1\System7\04_15_11\782834.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:30

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

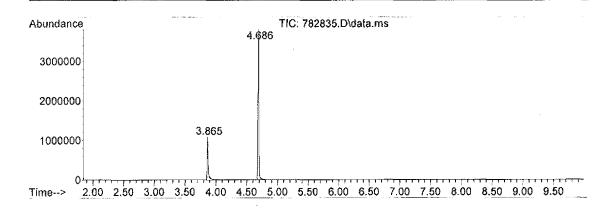
File Name : C:\msdchem\1\System7\04_15_11\782835.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:42

Sample Name :

Submitted by : ASD
Vial Number : 35
AcquisitionMeth: DRUGS.M
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 3.865 | 1408289 | | 32.19 |
| 4.686 | 4375283 | | 100.00 |

File Name : C:\msdchem\1\System7\04_15_11\782835.D

Operator : ASD

Date Acquired 15 Apr 2011 15:42

Sample Name ASD

Submitted by Vial Number 35 AcquisitionMeth: DRUGS.M Integrator : RTE

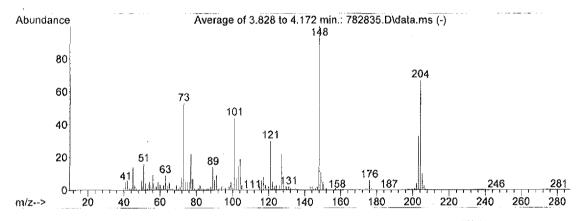
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

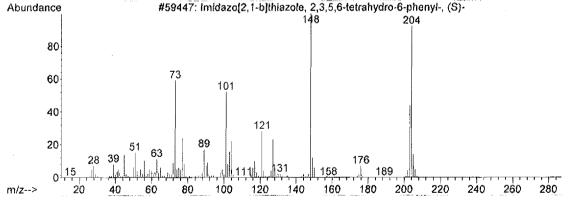
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | | CAS# | Qual |
|-----|------|------------------------------------|-------------|-------------|------|
| 1 | 3.86 | C:\Database\NIST05a.L | | | |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 014769-73-4 | 99 |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 014769-73-4 | 98 |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 006649-23-6 | 98 |





File Name : C:\msdchem\1\System7\04_15_11\782835.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:42

Sample Name : ASD

Submitted by Vial Number 35 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

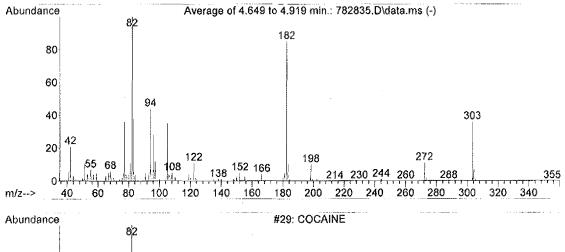
C:\Database\PMW_TOX2.L

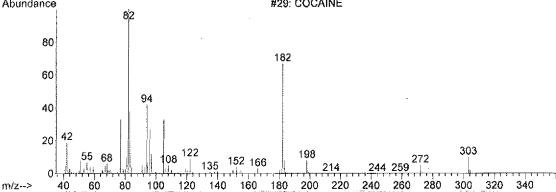
PK# RT Library/ID CAS# Qual

2 4.69 C:\Database\SLI.L

COCAINE

000050-36-2 99





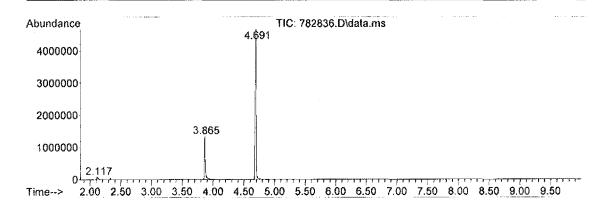
File Name : C:\msdchem\1\System7\04_15_11\782836.D

Operator : ASD

Date Acquired : 15 Apr 2011 15:55

Sample Name : Submitted by : ASD Vial Number : 36

Vial Number : 36 AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % | |
|-----------|---------|--------|---------|--|
| 2.117 | 159045 | 2,21 | 2.97 | |
| 3.865 | 1694593 | 23.50 | 31.63 | |
| 4.691 | 5357631 | 74.30 | 100.00 | |

File Name : C:\msdchem\1\System7\04_15_11\782836.D

: ASD Operator

Date Acquired 15 Apr 2011 15:55

Sample Name ASD Submitted by

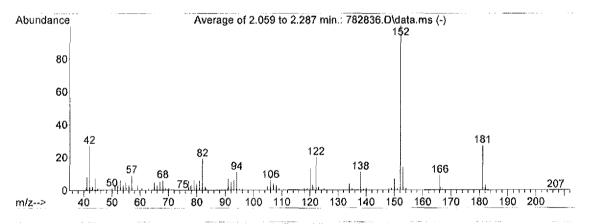
36 Vial Number AcquisitionMeth: DRUGS.M : RTE Integrator

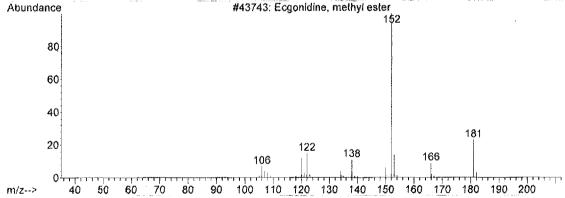
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80 C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-------------------------------------|-------------|------|
| 1 | 2.12 | C:\Database\NIST05a.L | 100000 04 0 | 0.5 |
| | | Ecgonidine, methyl ester | 127379-24-2 | 97 |
| | | 2-Carbomethoxy-8-methyl-8-azabicycl | · | 96 |
| | | 3,5-Dimethoxyphenethylamine | 003213-28-3 | 43 |





File Name : C:\msdchem\1\System7\04 15 11\782836.D

: ASD Operator

Date Acquired 15 Apr 2011 15:55

Sample Name Submitted by : ASD 36 Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

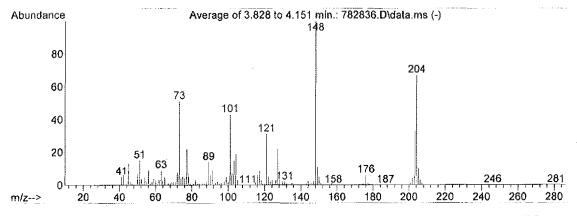
Search Libraries: C:\Database\SLI.L

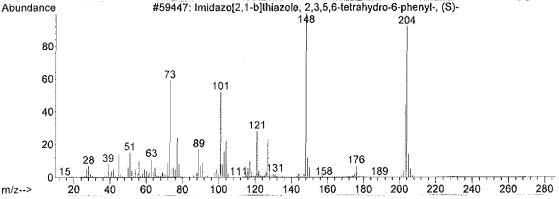
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

| PK# | RT | Library/ID | | CAS# | Qual |
|-------|------|------------------------------------|-------------|-------------|------|
| 2 | 3.86 | C:\Database\NIST05a.L | | | |
| | | Imidazo[2,1-b]thiazole, | 2,3,5,6-tet | 014769-73-4 | 99 |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 006649-23-6 | 98 |
| | | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 014769-73-4 | 98 |





File Name : C:\msdchem\1\System7\04_15_11\782836.D

Operator : ASD

Date Acquired 15 Apr 2011 15:55

Sample Name Submitted by ASD

Vial Number 36 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

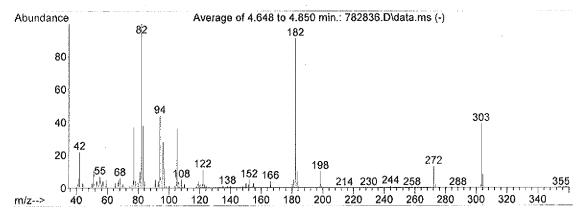
99

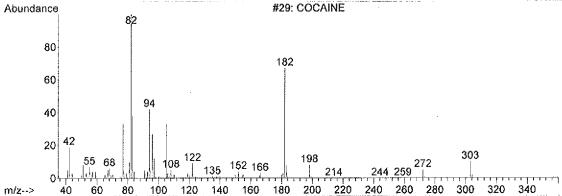
C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

4.69 C:\Database\SLI.L 3

COCAINE 000050-36-2





File Name : C:\msdchem\1\System7\04_15_11\782837.D

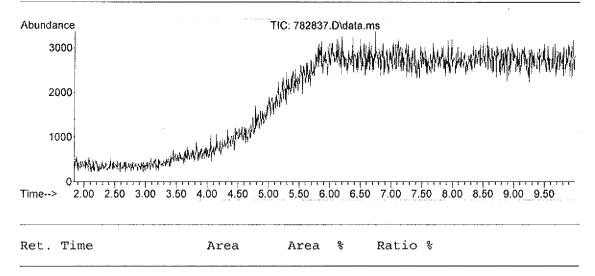
: ASD Operator

Date Acquired : 15 Apr 2011 16:07

Sample Name : BLANK Submitted by : ASD Vial Number 1 AcquisitionMeth: DRUGS.M

Integrator

: RTE



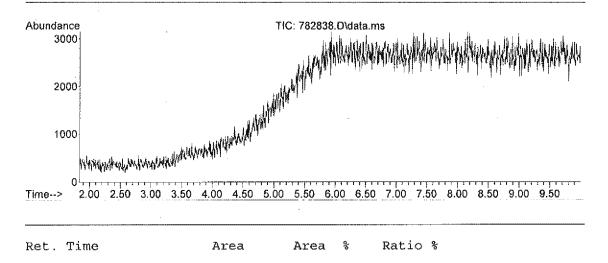
NO INTEGRATED PEAKS

File Name : C:\msdchem\1\System7\04_15_11\782838.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:20

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

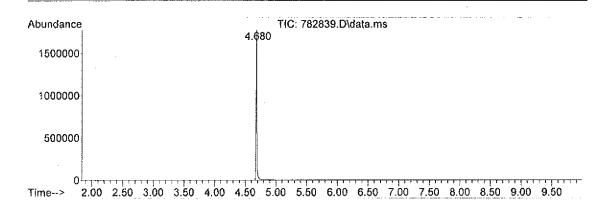
File Name : C:\msdchem\1\System7\04_15_11\782839.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:33

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.680 | 1806342 | 100.00 | 100.00 |

File Name : C:\msdchem\1\System7\04_15_11\782839.D

Operator : ASD

Date Acquired : 15 Apr 2011 16:33

Sample Name : COCAINE STD

Submitted by : ASD
Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

1 4.68 C:\Database\SLI.L COCAINE

AINE 000050-36-2 99

